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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,572

03/29/2004

Philippe Renard

P24493

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7055

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04/05/2006

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EXAMINER

BASINGER, SHERMAN D

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,572

Applicant(s)

RENARD ET AL.

Examiner

Sherman D. Basinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/089151.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-16, 18-41 and 44-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wojcik in view of Prade et al.

Wojcik discloses a hollow surfboard comprising

a lower half-shell 102 having no lateral side-walls;

an upper half-shell 100 comprising a sheet having downwardly curved

side-walls 100a, said upper half-shell being adapted to support a standing person during use of the surfboard;

at least one longitudinal partition 84, at least said one longitudinal partition vertically connecting said lower and upper half-shells.

Wojcik does not disclose that the upper shell sheet is foam or that the said longitudinal partition consisting essentially of foam. However, Wojcik does disclose that each is of ABS.

Prade et al discloses that lower shell 2 is of ABS or foams, that partition 7 is of ABS or foam, and that the upper shell is of elastic foam.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the upper and

lower shells of Wojcik of foam and to make the partition of foam, all similar to the foams used by Prade et al. Motivation to do so is found in the disclosure in lines 43-45 of column 2 of Prade.

Wojcik discloses a surfboard comprising
a deck 100 having a downwardly concave cross section, said deck
comprising a foam material, said deck being adapted to support a standing person
during use of the surfboard;
a hull 102 connected to said deck to form a subassembly;
at least one longitudinally extending partition 84 positioned within said
subassembly interposed between said deck and said hull.

Wojcik does not disclose that said hull comprises a
foam material and that said partition comprises a
polymeric elastic foam material extending along at least a majority of a distance
between said deck and said hull; said polymeric elastic foam material having a
compressible
elasticity or viscoelasticity to provide said deck with an ability to deflect downwardly
under
pressure exerted by a foot of a user on said deck relative to said hull and to cause said

deck to recover from said deflection upon cessation of said pressure exerted by the foot.

Note the foam material used by Prade including the polymeric elastic foam material of the top part 3 of the surfboard of Prade. See column 2, lines 38-48 and column 4, lines 19-21.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to use a foam similar to that of Prade for the hull of Wojcik and an elastic foam for both the hull and the partition of Wojcik. Motivation to do so would be to provide particular characteristics of flexibility and strength to the board of Wojcik. The result would be the hull of Wojcik comprising a

foam material and the partition comprising a polymeric elastic foam material extending along at least a majority of a distance between said deck and said hull, said polymeric elastic foam material having a compressible elasticity or viscoelasticity to provide said deck with an ability to deflect downwardly under pressure exerted by a foot of a user on said deck relative to said hull and to cause said deck to recover from said deflection upon cessation of said pressure exerted by the foot.

Wojcik also discloses a surfboard comprising a deck 100 adapted to support a standing person during use of the surfboard,

a hull 102 supporting said deck, said hull comprising a foam material, said deck and said hull enclosing an inner cavity having a length and a width; at least one longitudinal partition 84 extending between said deck and said hull along at least a portion of said length of said inner cavity and at least a majority of a height of said inner cavity to support said deck relative to said hull.

Wojcik does not disclose said deck comprising a foam material, nor the longitudinal partition 84 consisting essentially of a foam material, said foam material of said partition allowing said deck to deflect downwardly relative to said hull under pressure exerted by a foot of a user on said deck.

Note the foam material used by Prade including the polymeric elastic foam material of the top part 3 of the surfboard of Prade. See column 2, lines 38-48 and column 4, lines 19-21.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to comprise the deck of Wojcik of a foam material, and to consist essentially the longitudinal partition 84 of a foam material, said foam material of said partition allowing said deck to deflect downwardly relative to said hull under pressure exerted by a foot of a user on said deck in view of the foam materials used by Prade. Motivation to do so is to provide a particular amount of flexibility and strength to the board of Wojcik.

Wojcik also discloses a surfboard comprising

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a deck 100 adapted to support a standing person during use of the surfboard;
a hull 102 supporting said deck; said deck
and said hull enclosing an inner cavity having a length, a width, and a height,
at least one longitudinal partition 84 comprising a structural element to support
said deck relative to said hull and further comprising no additional structural element
extending along at least a majority of said height of said inner cavity.

Wojcik does not disclose the deck comprising a foam material, the hull comprising a
foam material and the longitudinal partition comprising a polymeric foam
material extending along substantially the height of said inner cavity from said deck to
said hull, said foam material being compressible under a force exerted on the deck by
the foot of the standing person.

Note the foam material used by Prade including the polymeric elastic foam material of
the top part 3 of the surfboard of Prade. See column 2, lines 38-48 and column 4, lines
19-21.

It would have been obvious at the time the invention was made to a person having
ordinary skill in the art to which said subject matter pertains to comprise the deck and
hull of Wojcik of a foam material, and to comprise the longitudinal partition 84 of a
polymeric foam
material extending along substantially the height of said inner cavity from said deck to
said hull, said foam material being compressible under a force exerted on the deck by

the foot of the standing person in view of the foams used by Prade. Motivation to do so is to provide a particular amount of flexibility and strength to the board of Wojcik.

Wojcik discloses a plurality of longitudinal partitions 80, 82 and 84.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make each of these partitions of elastic foam similar to the foam used for 3 of Prade by making the sheet of material used to make core 72 of Wojcik of such foam. Motivation to do so is to provide a particular degree of flexibility and strength to the board.

Wojcik teaches the use of thermo forming techniques for his shells and partition material. However, to make the lower shell in a different manner would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. For example, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to form the lower shell by laying up fiber glass. Motivation to do so is to form the shell 102 in another well know manner.

Note that claim 6 is a product by process claim, and that in such claims the patentability depends on the structure as opposed to the process.

Wojcik in combination with Prade does not disclose the use of a foam as defined in claims 10-13, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 38, 39, 40, 41. However to use such a foam would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. The type of foam used for the upper shell or deck, the lower shell or hull and the partition is based upon the flexibility and strength desired. Thus one would chose a particular type of foam which gives the desired result.

In Wojcik the partition extends at least 70 percent of the length of the inner cavity. Also, since the sheet of core 72 forming partitions 80, 82 and 84 of Wojcik is modified to be of a foam or an elastic foam in view of Prade, the partitions will have a longitudinal side surface exposed to the inner cavity of the board, will not include a honeycomb, will comprise a material continuous along the height and width of the foam, will be continuous along the width of the partition through the entirety of the height of the partition, will consist essentially of foam, will have a elasticity and viscoelasticity as claimed, will not consist essentially of an internal reinforcing structure within its sidewalls and will be the most rigid partition.

In Wojcik the upper half shell or deck 100 is not symmetrical with respect to the hull 102 and the deck or upper half shell is not reinforced with a honeycomb.

3. Claims 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paccoret et al.

Paccoret et al discloses an aquatic gliding board comprising
a hollow inner shell formed by 22 and 22';
an outer shell formed by 20 and 20';
a casing 24 and 24' between said inner shell and said outer shell;
at least one longitudinally extending partition 14 within said hollow inner shell, said
partition being made of a material different from that of the casing.

Paccoret et al does not disclose the casing as comprising
at least one layer of a thermoformed extruded polystyrene foam. Note that casing 24' is
formed of a foam.

It would have been obvious at the time the invention was made to a person having
ordinary skill in the art to which said subject matter pertains to form casings 24 and 24'
of thermoformed extruded polystyrene foam. Motivation to do so is to use a foam which
is of a closed cell, which is buoyant and which provides strength.

While Paccoret et al does disclose that the partition is made of a different material than
the casing (formed of material similar to the upper and lower board sections which
means that the partition is not foam alone), Paccoret et al does not disclose the partition

as being made of wood. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the partition of balsa wood as balsa wood offers strength while being very light.

If the partition is made similar to the top and bottom sections, it is made of foam.

In Paccoret et al does the plurality of transversely spaced apart longitudinally extending partitions are 10 and 12. These partitions have transverse extension due to their width.

4. Claims 8, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wojcik and Prade et al as applied to claim 1 above, and further in view of EP 0 575 130.

Wojcik does not disclose that the foam sheet of the upper half-shell is laminated on opposite sides with at least one layer of resin-impregnated fibers. Note in EP 130 column 5, lines 22-24. In view of lines 22-25, column 5 of EP 130, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to laminate the foam sheet of the upper half-shell on opposite sides with at least one layer of resin-impregnated fibers. Motivation to do so is to strengthen the shell.

Wojcik does not disclose said upper half-shell or deck further comprising a honeycomb structure in an area of

said upper half-shell adapted to support a user's feet.

Note the use of honeycomb in the upper and lower shells of EP 130. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to form the upper shell with honeycomb structure in an area adapted to support a user's feet similar to the honeycomb used in the upper shell of EP 130. Motivation to do so is to further strengthen the deck or half-shell in this area.

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Glydon is cited to show the use of polyethylene foam in making top and bottom surfaces of a sports board.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sherman D. Basinger
Primary Examiner
Art Unit 3617

4/4/06